

REMARKS

In accordance with the foregoing, the specification and claim 14 have been amended, and claims 1-13 and 20 have been canceled. Claims 14-19 are pending, with claim 14 being independent. Claims 14-19 are under consideration as being directed to elected Invention III. Canceled claims 1-7 were withdrawn from consideration as being directed to non-elected Invention I, and canceled claims 8-14 were withdrawn from consideration as being directed to non-elected Invention II. No new matter is presented in this Amendment.

Entry of Amendment After Final Rejection

It is submitted that entry of this Amendment After Final Rejection is proper under 37 CFR 1.116 and MPEP 714.12 and 714.13 because it amends one paragraph of the specification to correct several minor errors, cancels 1-13 which were withdrawn from consideration as being directed to non-elected inventions as required by MPEP 821.01, amends independent claim 14 to include the limitations of dependent claim 20 which previously depended from claim 14, and cancels claim 20. Thus, independent claim 14 as amended in this Amendment After Final Rejection is now equivalent to dependent claim 20 as considered by the Examiner in the final Office Action of June 6, 2006. Accordingly, it is submitted that this Amendment After Final Rejection does not raise new issues that would require further consideration or search, and it is respectfully requested that this Amendment After Final Rejection be entered.

Request for Consideration of Information Disclosure Statement

An Information Disclosure Statement was filed on July 26, 2006, and it is respectfully requested that the Information Disclosure Statement be considered.

Elections/Restrictions

In the final Office Action of June 6, 2006, the Examiner did not respond to the applicant's arguments on page 7 of the Amendment of April 11, 2006, traversing the reformulated requirement for restriction between Inventions I and II set forth on page 2 of the Office Action of January 11, 2006. Rather, on page 2 of the final Office Action of June 6, 2006, the Examiner

merely repeated the previous Examiner's response set forth on page 2 of the Office Action of January 11, 2006, to the applicant's arguments on pages 1-2 of the Response to Restriction Requirement of November 10, 2005, traversing the requirement for restriction between Inventions I and II set forth in the Office Action of October 18, 2005.

Although claims 1-13 which were directed to nonelected Inventions I and II have now been canceled in this Amendment After Final Rejection, it is nevertheless requested that the Examiner respond to the applicant's arguments on page 7 of the Amendment of April 11, 2006, traversing the reformulated requirement for restriction between Inventions I and II set forth on page 2 of the Office Action of January 11, 2006, to avoid the necessity of having to resolve this issue in any divisional application which may be filed since the Examiner should have responded to these arguments in the final Office Action of June 6, 2006.

Claim Objections

Claim 20 was objected to under 37 CFR 1.75(c) as being of improper dependent form for failing to further limit the subject matter of a previous claim. Although this objection has been rendered moot by the cancellation of claim 20, independent claim 14 from which claim 20 previously depended has been amended to include the limitations of canceled claim 20. Accordingly, this objection is respectfully traversed with respect to the Examiner's position that the limitations of canceled claim 20 which are now recited in independent claim 14 do not further limit the subject matter of independent claim 14.

The Examiner is of the opinion that the feature "wherein the frame is flat on at least a side of the frame that supports the one surface of the mask" now recited in claim 14 and previously recited in claim 20 does not further limit claim 14 (not claim 1 as indicated by the Examiner) which recites that "the frame has a flat surface where the frame supports the one surface of the mask." However, the limitation "the frame has a flat surface where the frame supports the one surface of the mask" refers only to a portion of the frame where the frame supports the one surface of the mask, i.e., a portion of the frame that contacts the one surface of the mask, while the limitation "wherein the frame is flat on at least a side of the frame that supports the one surface of the mask" refers to a side of the frame that supports the one surface of the mask, rather than to just a portion of the frame where the frame supports the one surface of the mask.

Also, the Examiner is of the opinion that the feature "wherein the cover mask is flat on at least a side of the cover mask that supports the opposite surface of the mask" now recited in claim 14 and previously recited in claim 20 does not further limit claim 14 (not claim 1 as indicated by the Examiner) which recites that "the cover mask . . . has a flat surface where the cover mask supports the opposite surface of the mask." However, the limitation "the cover mask . . . has a flat surface where the cover mask supports the opposite surface of the mask" refers only to a portion of the cover mask where the cover mask supports the opposite surface of the mask, i.e., a portion of the cover mask that contacts the opposite surface of the mask, while the limitation "wherein the cover mask is flat on at least a side of the cover mask that supports the opposite surface of the mask" refers to a side of the cover mask that supports the opposite surface of the mask, rather than to just a portion of the cover mask where the cover mask supports the opposite surface of the mask.

Claim Rejections Under 35 USC 103

Claims 14-17 and 20

Claims 14-17 and 20 were rejected under 35 USC 103(a) as being unpatentable over Utsugi et al. (Utsugi) (U.S. Patent Application Publication No. 2002/0150674) in view of Ito et al. (Ito) (U.S. Patent No. 5,652,067) and Martin (U.S. Patent No. 4,676,193). Although the rejection of claim 20 has been rendered moot by the cancellation of claim 20, it is noted that independent claim 14 has been amended to include the limitations of canceled claim 20 which depended from claim 14. The rejection of claims 14-17 is respectfully traversed.

Although the Examiner included claim 20 in the statement of the rejection of claims 14-17 and 20, it is submitted that the Examiner did not actually consider claim 20 in the final Office Action of June 6, 2006, because the Examiner did not provide an explanation of the rejection of claim 20 in the body of the rejection on pages 3-4 of the final Office Action of June 6, 2006, and did not otherwise address the features "wherein the frame is flat on at least a side of the frame that supports the one surface of the mask; and wherein the cover mask is flat on at least a side of the cover mask that supports the opposite surface of the mask" recited in claim 20. As indicated above, claim 20 has now been canceled and independent claim 14 from which claim 20 depended has been amended to include these features of canceled claim 20. Accordingly, should the Examiner reject claim 14 in the next Office Action, it is submitted that the Examiner

cannot make that Office Action final because such a rejection of claim 14 will be a new ground of rejection since claim 14 is now equivalent to canceled claim 20, and the Examiner did not actually consider claim 20 in the final Office Action of June 6, 2006.

Claim 14

It is submitted that Utsugi, Ito, and Martin do not disclose or suggest the features "wherein the frame is flat on at least a side of the frame that supports the one surface of the mask; and wherein the cover mask is flat on at least a side of the cover mask that supports the opposite surface of the mask" now recited in independent claim 14 and previously recited in canceled claim 20 which depended from claim 14.

The Examiner considers the metal foil 40' in FIG. 7 of Martin to be a "mask" as recited in claim 14, considers the dimensionally stabilized mask supporting frame 34 in FIG. 7 of Martin to be "a frame supporting one surface of the mask so that the mask is tensed" as recited in claim 14, and considers the outer support flange 90 in FIG. 7 of Martin to be "a cover mask supporting an opposite surface of the mask, wherein the mask corresponds to the frame" as recited in claim 14.

However, Martin's dimensionally stabilized mask supporting frame 34 is not flat on at least a side of the dimensionally stabilized mask supporting frame 34 that supports the one surface of the metal foil 40' because that side of the dimensionally stabilized mask supporting frame 34 includes the raised ridge 38 as shown in FIG. 7 of Martin and described in column 10, lines 24-27 and 56-57 of Martin. Accordingly, it is submitted that Utsugi, Ito, and Martin do not disclose or suggest the feature "wherein the frame is flat on at least a side of the frame that supports the one surface of the mask" now recited in independent claim 14 and previously recited in canceled claim 20 which depended from claim 14.

Furthermore, the outer support flange 90 in FIG. 7 of Martin which the Examiner considers to be a "cover mask" as recited in claim 14 is not in fact a separate element, but is an integral part of the clamping member 88 which includes the outer support flange 90 and the raised boss member 98 as shown in FIG. 7 of Martin and described in column 10, lines 40-41 and 47-49, of Martin. However, Martin's clamping member 88 is not flat on at least a side of the cover mask that supports the opposite surface of the metal foil 40' because that side of the

clamping member 99 includes the raised boss member 98 as shown in FIG. 7 of Martin and described in column 10, lines 40-41 and 47-49, of Martin. Accordingly, it is submitted that Utsugi, Ito, and Martin do not disclose or suggest the feature "wherein the cover mask is flat on at least a side of the cover mask that supports the opposite surface of the mask" now recited in independent claim 14 and previously recited in canceled claim 20 which depended from claim 14.

Claim 15

It is submitted that Utsugi, Ito, and Martin do not disclose or suggest the feature of claim 15 "wherein the mask is formed of nickel or an alloy of nickel and cobalt" as alleged by the Examiner because paragraph [0042] of Utsugi referred to by the Examiner does not teach that "the mask may be formed of nickel" as alleged by the Examiner. Rather, this paragraph states that "[t]he patterning mask may contain a magnetic element such as nickel, cobalt and iron when the patterning mask is attracted by the magnet, and the nickel-plated patterning mask may be effectively used." It is submitted that a mask that "is formed of nickel" as recited in claim 15 is made entirely of nickel, and nothing whatsoever in Utsugi discloses or suggests that Utsugi's patterning mask "is formed of nickel" as recited in claim 15, particularly in light of paragraph [0049] of Utsugi which states that "[a] patterning mask . . . was made of copper having a nickel-plated surface" and paragraphs [0058], [0073], and [0084] of Utsugi which state that "[t]he patterning mask . . . was also prepared by etching a copper plate the surface of which was nickel-plated."

Claim 17

It is submitted that Utsugi, Ito, and Martin do not disclose or suggest the feature of claim 17 "wherein the mask, the frame, and the cover mask are joined together by welding" as alleged by the Examiner because column 10, lines 22-32, of Martin which the Examiner considers to teach this feature of claim 17 relates to the embodiment shown in FIGS. 1-6 of Martin in which the metal foil 40' is welded to the raised ridge 38 with the metal foil 40' under tension as described in column 10, lines 27-29, of Martin. In contrast, in the alternative embodiment in FIG. 7 of Martin which includes the clamping member 88 having the outer support flange which the

Examiner considers to be a "cover mask" as recited in claim 17, the clamping member 88 clamps the periphery of the metal foil 40' between the outer support flange 90 and the dimensionally stabilized mask supporting frame 34 to establish and maintain a radial tension in the metal foil 40' as described in column 10, lines 62-66, of Martin. The welding is used only in the embodiment in FIGS. 1-6 of Martin and not in the alternative embodiment in FIG. 7 of Martin as clearly described in the following passage in column 21, lines 18-30, of Martin:

The above method can utilize the step of rigidly affixing the periphery of the metal foil mask 40' to the circumferentially extending surface by the step of welding the periphery of the metal foil mask 40' to the dimensionally stabilized mask supporting frame 34. In the alternative, a method can utilize the step of rigidly affixing the periphery of the metal foil mask 40' to the circumferentially extending surface by including the step of clamping the periphery of the metal foil mask 40' by a clamping member 88 against the dimensionally stabilized mask supporting frame 34, both illustrated in FIG. 7, to maintain a radial tension in the metal foil mask 40'.

It is submitted that nothing whatsoever in Martin discloses or suggests that the metal foil ("mask") 40', the dimensionally stabilized mask supporting frame ("frame") 34, and the clamping member ("cover mask") 88 are joined together by welding in the embodiment of FIG. 7 of Martin relied on by the Examiner. Accordingly, it is submitted that Utsugi, Ito, and Martin do not disclose or suggest the feature of claim 17 "wherein the mask, the frame, and the cover mask are joined together by welding" as alleged by the Examiner.

Claim 16

It is submitted that claim 16 which depends from claim 14 is patentable over Utsugi, Ito, and Martin for at least the same reasons that claim 14 is patentable thereover as discussed above.

Conclusion—Claims 14-17

For at least the foregoing reasons, it is respectfully requested that the rejection of claims 14-17 under 35 USC 103(a) as being unpatentable over Utsugi in view of Ito and Martin be withdrawn.

Claims 18-19

Claims 18-19 were rejected under 35 USC 103(a) as being unpatentable over Utsugi in view of Ito and Martin as applied to claims 14 and 17, and further in view of Kitazume (U.S. Patent Application Publication No. 2002/0025406). This rejection is respectfully traversed.

It is submitted that claims 18-19 which depend from claim 17 which depends from claim 14 are patentable over Utsugi, Ito, Martin, and Kitazume for at least the same reasons that claims 14 and 17 are patentable over Utsugi, Ito, and Martin as discussed above. Accordingly, it is respectfully requested that the rejection of claims 18-19 under 35 USC 103(a) as being unpatentable over Utsugi in view of Ito and Martin as applied to claims 14 and 17, and further in view of Kitazume be withdrawn.

Conclusion

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with the filing of this paper, please charge the same to our Deposit Account No. 503333.

Respectfully submitted,

STEIN, MCEWEN & BUI, LLP

Date: 09/06/06

By: 

Randall S. Svihla
Registration No. 56,273

1400 Eye St., N.W.
Suite 300
Washington, D.C. 20005
Telephone: (202) 216-9505
Facsimile: (202) 216-9510